

SEQUENCE LISTING

<110> Zhu, Zhenping

<120> Bispecific Immunoglobulin-Like Antigen Binding Proteins and Method of Production

<130> 11245/47102

<140> filed concurrently herewith

<141> 2001-05-24

<150> US 60/206,749

<151> 2000-05-24

<160> 34

<170> WordPerfect 8.0 for Windows

<210> 1

<211> 10

<212> PRT

<213> Mouse

<400> 1

Gly Phe Asn Ile Lys Asp Phe Tyr Met His
1 5 10

<210> 2

<211> 17

<212> PRT

<213> Mouse

<400> 2

Trp Ile Asp Pro Glu Asn Gly Asp Ser Gly Tyr Ala Pro Lys Phe Gln
1 5 10 15

Gly
17

<210> 3

<211> 8

<212> PRT

<213> Mouse

<400> 3

Tyr Tyr Gly Asp Tyr Glu Gly Tyr
1 5

<210> 4

<211> 10

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<400> 4

Ser Ala Ser Ser Ser Val Ser Tyr Met His
1 5 10

<210> 5

<211> 7
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<400> 5

Ser Thr Ser Asn Leu Ala Ser
1 5

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<211> 9
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<400> 6

Gln Gln Arg Ser Ser Tyr Pro Phe Thr
1 5

<210> 7
<211> 117
<212> PRT
<213> Mouse

<400> 7

Gln Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Gly Ser Gly Ala
1 5 10 15
Ser Val Lys Leu Ser Cys Thr Thr Ser Gly Phe Asn Ile Lys Asp Phe
20 25 30
Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
35 40 45
Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Gly Tyr Ala Pro Lys Phe
50 55 60
Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Ser Asn Thr Ala Tyr
65 70 75 80
Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr
100 105 110
Val Thr Val Ser Ser
115

<210> 8
<211> 108
<212> PRT
<213> Mouse

<400> 8

Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1 5 10 15
Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
20 25 30

[illegible]

<400> 9

30

<400> 10

51

<400> 11

24

<400> 12

30

<400> 13

21

<210> 14
<211> 27
<212> DNA
<213> Mouse

<400> 14

cagcaaagga gtagttaccc attcacg

27

<210> 15
<211> 351
<212> DNA
<213> Mouse

<400> 15

cagggtcaagc	tgcagcagtc	tggggcagag	cttgtggggg	caggggcctc	agtcaaattg	60
tcttgacaaa	cttctggctt	caacattaaa	gacttctata	tgcactgggt	gaagcagagg	120
cctgaacagg	gcctggagtg	gattggatgg	attgatcctg	agaatgggtg	ttctgggtat	180
gccccgaagt	tccaggggcaa	ggccaccatg	actgcagact	catcctccaa	cacagcctac	240
ctgcagctca	gcagcctgac	atctgaggac	actgccgtct	attactgtaa	tgcatactat	300
ggtgactacg	aaggctactg	gggccaaggg	accacgggtc	ccgtctctc	a	351

<210> 16
<211> 324
<212> DNA
<213> Mouse

<400> 16

gacatcgagc	tcactcagtc	tccagcaatc	atgtctgcat	ctccagggga	gaaggtcacc	60
ataacctgca	gtgccagctc	aagtgtgaag	tacatgcact	ggttccagca	gaagccaggc	120
acttctccca	aactctggat	ttatagcaca	tccaacctgg	cttctggagt	ccctgctcgc	180
ttcagtggca	gtggatctgg	gacctcttac	tctctcacia	tcagccgaat	ggaggctgaa	240
gatgctgcca	cttattactg	ccagcaaagg	agtagttacc	cattcacgtt	cggctcgggg	300
accaagctgg	aaataaaacg	ggcg				324

<210> 17
<211> 15
<212> PRT
<213> Mouse

<400> 17

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10 15

<210> 18
<211> 45
<212> DNA
<213> Mouse

<400> 18

ggtggaggcg gttcaggcgg aggtggctct ggcggtggcg gatcg

45

<210> 19
<211> 10
<212> PRT

<213> Mouse

<400> 19

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
1 5 10

<210> 20

<211> 15

<212> DNA

<213> Mouse

<400> 20

ggtggaggcg gttca

15

<210> 21

<211> 17

<212> PRT

<213> Mouse

<400> 21

Trp Ile Asp Pro Glu Asn Gly Asp Ser Asp Tyr Ala Pro Lys Phe Gln
1 5 10 15

Gly
17

<210> 22

<211> 117

<212> PRT

<213> Mouse

<400> 22

Gln Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Gly Ser Gly Ala
1 5 10 15

Ser Val Lys Leu Ser Cys Thr Thr Ser Gly Phe Asn Ile Lys Asp Phe
20 25 30

Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
35 40 45

Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Asp Tyr Ala Pro Lys Phe
50 55 60

Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Ser Asn Thr Ala Tyr
65 70 75 80

Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95

Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr
100 105 110

Val Thr Val Ser Ser
115

<210> 23

<211> 106
 <212> PRT
 <213> Mouse

<400> 23

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Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
 1           5           10           15
Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
          20           25           30
His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys Leu Trp Ile Tyr
          35           40           45
Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
          50           55           60
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
          65           70           75           80
Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Ser Tyr Pro Phe Thr
          85           90           95
Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
          100           105
  
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<210> 24
 <211> 51
 <212> DNA
 <213> Mouse

<400> 24

tggattgata ctgagaatgg tgattctgat tatgccccga agttccaggg c 51

<210> 25
 <211> 351
 <212> DNA
 <213> Mouse

<400> 25

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caggtcaagc tgcagcagtc tggggcagag cttgtggggt caggggcctc agtcaaattg 60
tcctgcacaa cttctggctt caacattaaa gacttctata tgcactgggt gaagcagagg 120
cctgaacagg gcctggagtg gattggatgg attgatcctg agaatgggtga ttctgattat 180
gccccgaagt tccagggcaa ggccaccatg actgcagact catctcccaa cacagcctac 240
ctgcagctca gcagcctgac atctgaggac actgccgtct attactgtaa tgcatactat 300
ggtgactacg aaggctactg gggccaaggg accacggtca cgtctcctc a 351
  
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<210> 26
 <211> 318
 <212> DNA
 <213> Mouse

<400> 26

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ataacctgca gtgccagctc aagtgtgaagt tacatgcact gggtccagca gaagccaggc 120
acttctccca aactctggat ttatagcaca tccaacctgg cttctggagt ccctgctcgc 180
ttcagtggca gtggatctgg gacctcttac tctctcacia tcagccgaat ggaggctgaa 240
gatgctgccca cttattactg ccagcaaagg agtagttacc cattcacgtt cggctcgggg 300
  
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accaagctgg aaataaaa

318

<210> 27
<211> 240
<212> PRT
<213> Mouse

<400> 27

Gln Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Gly Ser Gly Ala
1 5 10 15
Ser Val Lys Leu Ser Cys Thr Thr Ser Gly Phe Asn Ile Lys Asp Phe
20 25 30
Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
35 40 45
Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Gly Tyr Ala Pro Lys Phe
50 55 60
Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Ser Asn Thr Ala Tyr
65 70 75 80
Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr
100 105 110
Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly
115 120 125
Gly Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met Ser
130 135 140
Ala Ser Pro Gly Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser
145 150 155 160
Val Ser Tyr Met His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys
165 170 175
Leu Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg
180 185 190
Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg
195 200 205
Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Ser
210 215 220
Tyr Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg Ala
225 230 235 240

<210> 28
<211> 238
<212> PRT
<213> Mouse

<400> 28

Gln Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Gly Ser Gly Ala
1 5 10 15

05965193-052404

Ser Val Lys Leu Ser Cys Thr Thr Ser Gly Phe Asn Ile Lys Asp Phe
20 25 30
Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
35 40 45
Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Asp Tyr Ala Pro Lys Phe
50 55 60
Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Ser Asn Thr Ala Tyr
65 70 75 80
Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr
100 105 110
Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly
115 120 125
Gly Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met Ser
130 135 140
Ala Ser Pro Gly Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser
145 150 155 160
Val Ser Tyr Met His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys
165 170 175
Leu Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg
180 185 190
Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg
195 200 205
Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Ser
210 215 220
Tyr Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
225 230 235

<210> 29
<211> 43
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 29

ctagtagcaa ctgccaccgg cgtacattca caggtcaagc tgc

43

<210> 30
<211> 30
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 30

tcgaaggatc actcaccttt tatttcagc

30

<210> 31

<211> 52

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 31

ggtcaaaagc ttatggggat ggtcatgtat catccttttt ctagtagcaa ct

52

<210> 32

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Signal

<400> 32

tcgatctaga aggatccact cacgttttat ttccag

36

<210> 33

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> leader peptide

<400> 33

Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
5 10 15

Val His Ser
19

<210> 34

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 34

tctcggccgg cttaagctgc gcatgtgtga gt

32